

**NEW!**

# RB Series Rolling Ball Sensor Switch

## Features/Benefits

- Different angle options to trigger
- Ultra miniature design
- Patent awarded

## Typical Applications

- Household goods
- Electronic toys
- Consumer electronics including irons, portable heaters, games, toys
- Safety and security controls

## Specifications

CONTACT ARRANGEMENT: SPST

SENSOR ANGLE: 0° to -10° scope inside, terminal to disconnection electric current

MINIMUM VOLTAGE: 1 VDC 10mA (resistive load)

MAXIMUM VOLTAGE: 5 VDC 1mA (resistive load)

OPERATING LIFE: 100,000 cycles

INSULATION RESISTANCE: 1000 M  $\Omega$  min. @ 100 VDC

DIELECTRIC STRENGTH: 500 V AC (50-60 Hz)

OPERATING TEMPERATURE: -20°C to +70°C

## Materials

FRAME: Copper alloy, nickel plated

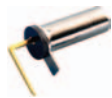
COVER: PA 46 (UL94V-0).

MOVABLE CONTACT: Copper alloy, nickel plated

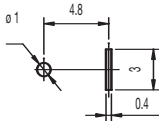
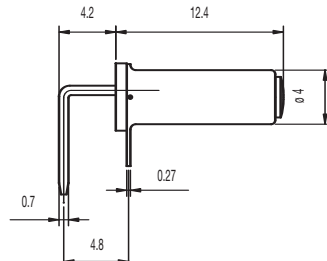
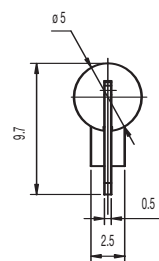
TERMINALS: Copper alloy, gold plated

BRASS BALL: Brass, nickel plated

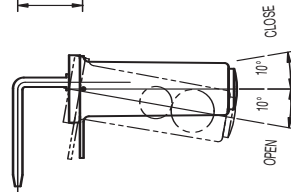
**NOTE:** Specifications and materials listed above are for switches with standard options. For information on specific and custom switches, consult Customer Service Center.



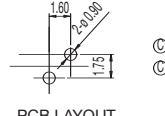
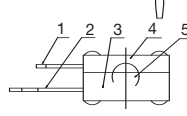
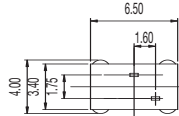
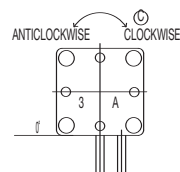
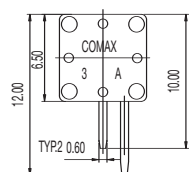
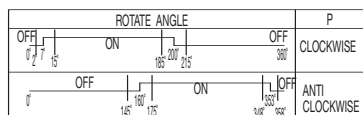
PART NUMBER	PACKAGING
<b>RB-231X2</b>	1,000 pieces



PCB LAYOUT



PART NUMBER	PACKAGING
<b>RB-220-07 R</b>	500 pieces



PCB LAYOUT

## Specifications

CONTACT ARRANGEMENT: SPST

SENSOR ANGLE: 15° to 90° scope inside, terminal to disconnection electric current

MINIMUM VOLTAGE: 1 VDC 10mA (resistive load)

MAXIMUM VOLTAGE: 5 VDC 1mA (resistive load)

OPERATING LIFE: 20,000 cycles (without load);  
100,000 cycles with load

INSULATION RESISTANCE: 10 M  $\Omega$  min. @ 100 VDC

DIELECTRIC STRENGTH: 100 V AC (50-60Hz)

OPERATING TEMPERATURE: -10°C to +50°C

## Materials

HOUSING: PA

COVER: PA

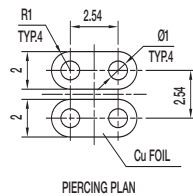
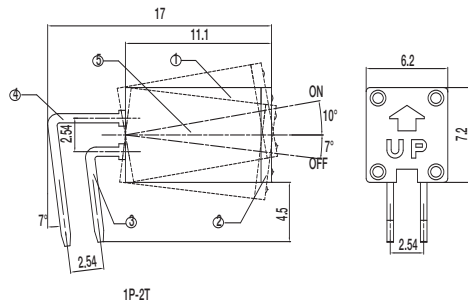
BALL: Gold plated

**NOTE:** Specifications and materials listed above are for switches with standard options. For information on specific and custom switches, consult Customer Service Center.

# RB Series Rolling Ball Sensor Switch

**NEW!**

PART NUMBER	PACKAGING
<b>RB-435B</b>	500 pieces



## Specifications

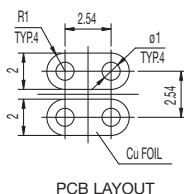
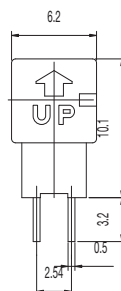
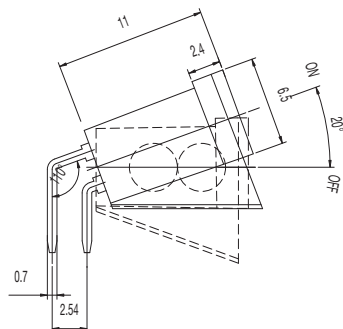
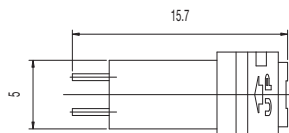
CONTACT ARRANGEMENT: SPDT  
 MINIMUM VOLTAGE: 1 VDC 10mA (resistive load)  
 MAXIMUM VOLTAGE: 5 VDC 1mA (resistive load)  
 OPERATING LIFE: 100,000 cycles  
 INITIAL CONTACT RESISTANCE: 5  $\Omega$  max.  
 INSULATION RESISTANCE: 1000 M  $\Omega$  min. @ 500 VDC  
 DIELECTRIC STRENGTH: 500 V AC (50-60 Hz)  
 OPERATING TEMPERATURE: -20°C to +70°C

## Materials

HOUSING: PA (UL94V-0)  
 COVER: PA (UL94V-0)  
 MOVABLE CONTACT: Copper alloy, nickel plated  
 TERMINALS: Gold plated  
 BALL: Steel, gold plated

**NOTE:** Specifications and materials listed above are for switches with standard options. For information on specific and custom switches, consult Customer Service Center.

PART NUMBER	PACKAGING
<b>RB-435X2-20</b>	500 pieces



## Specifications

CONTACT ARRANGEMENT: SPDT  
 SENSOR ANGLE: -20° to -30° scope inside, terminal to disconnection electric current  
 MINIMUM VOLTAGE: 1 VDC 10mA (resistive load)  
 MAXIMUM VOLTAGE: 5 VDC 1mA (resistive load)  
 OPERATING LIFE: 100,000 cycles  
 INSULATION RESISTANCE: 1000 M  $\Omega$  min. @ 100 VDC  
 DIELECTRIC STRENGTH: 500 V AC (50-60 Hz)  
 OPERATING TEMPERATURE: -20°C to +70°C

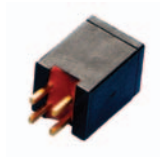
## Materials

HOUSING: PBT (UL94V-0)  
 COVER: PBT (UL94V-0)  
 TERMINALS: Gold plated  
 BALL: Steel, gold plated

**NOTE:** Specifications and materials listed above are for switches with standard options. For information on specific and custom switches, consult Customer Service Center.

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## RB Series Rolling Ball Sensor Switch



PART NUMBER	PACKAGING
<b>RB-441-45</b>	500 pieces

### Specifications

CONTACT ARRANGEMENT: SPDT

MAXIMUM VOLTAGE: 24 VDC 25mA (resistive load)

OPERATING LIFE: 100,000 cycles

INSULATION RESISTANCE: 1000 M  $\Omega$  min. @ 100 VDC

DIELECTRIC STRENGTH: 500 V AC (50-60 Hz)

OPERATING TEMPERATURE: -20°C to +70°C

### Materials

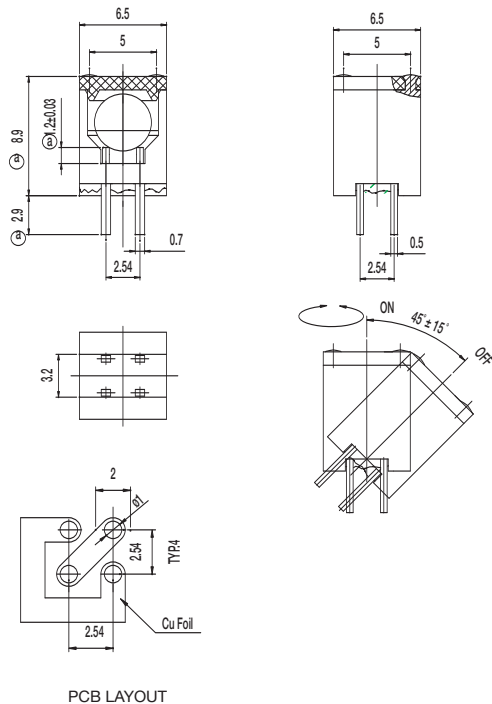
HOUSING: PBT (UL94V-0)

COVER: PBT (UL94V-0)

TERMINALS: Gold plated

BALL: Gold plated

**NOTE:** Specifications and materials listed above are for switches with standard options. For information on specific and custom switches, consult Customer Service Center.



PCB LAYOUT